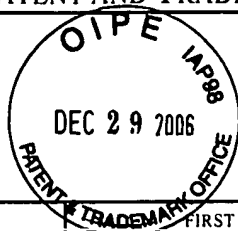




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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/081,182      | 02/25/2002  | Minoru Koshimizu     | 112054              | 2088             |

25944 7590 12/27/2006  
OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER

BRINICH, STEPHEN M

ART UNIT PAPER NUMBER

2625

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 12/27/2006 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  |                                       |   |  |
|--|---------------------------------------|---|--|
| <p align="center"><b>Office Action Summary</b></p> | <b>Application No.</b><br>10/081,182  | <b>Applicant(s)</b><br>KOSHIMIZU ET AL. |  |
|  | <b>Examiner</b><br>Stephen M. Brinich | <b>Art Unit</b><br>2625                 |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 4-6, 10 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/4/02, 10/11/06</u> . | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-3 & 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Thirant (US 4240712).

Re claims 1-2 & 7, Thirant discloses (Abstract; column 1, lines 10-14; column 2, lines 34-38; column 5, lines 60-68; column 6, line 59 - column 7, line 16) an optical write image display screen which is switched between two modes, one of which is a transparent (light transmission image writing) mode and the other of which is a scattering (light dispersion image display) mode. Specifically, a thin layer (1) is switched by a role switch section (generator 410 and electrodes 40 & 41) in order to alter its optical characteristics between transparent and scattering mode. Insofar as any layer through which light must pass inherently dims it to some degree, this layer is readable on the recited (and not further specified except insofar as the previously described limitations pertain to it) "dimmer layer".

Re claims 3 & 8-9, Thirant further discloses (column 7, lines 53-61) that one image may be erased and another (necessarily different in optical characteristics and display mode in order to be perceived as different images) written in

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its place. Particularly re claim 3, such an erasure of one image and writing of another necessarily includes a mode transition in both directions (i.e. the mode transition is necessarily reversible).

***Allowable Subject Matter***

3. Claims 4-6 & 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter:

Re claims 4-5, the art of record does not teach or suggest the recited dimmer layer in conjunction with the recited two-mode optical write image display screen.

Re claim 6, the art of record does not teach or suggest the recited position and attitude adjustment in conjunction with the recited two-mode optical write image display screen.

Re claim 10, the art of record does not teach or suggest the recited access-responsive communication arrangement in conjunction with the recited two-mode optical write image display screen.

Re claim 11, the art of record does not teach or suggest the recited arrangement of multiple independently controlled

areas in conjunction with the recited two-mode optical write image display screen.

***Response to Arguments***

5. Applicant's arguments filed 10/11/06 have been fully considered but they are not persuasive.

Applicant argues (10/11/06 Remarks: page 5, line 11 - page 6, line 6) that the Thirant teaches the switching of a display screen between transparent and scattering modes (by varying long molecule orientation), but does not teach the switching of a dimmer layer between light transmission and light dispersion modes.

As noted above, insofar as any layer through which light must pass inherently dims it to some degree, the thin layer of Thirant is readable on the recited "dimmer layer", insofar as it corresponds to the above described limitations of having the recited light transmission (transparent) and light dispersion (scattering) modes.

Applicant argues (10/11/06 Remarks: page 6, lines 7-9) that claim 11 is allowable for at least its dependence on claim 1.

Applicant's arguments re claim 1 have been addressed above.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS**

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**ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning the contents of this communication or earlier communications from the examiner should be directed to Stephen M. Brinich at 571-272-7430.

Any inquiry relating to the status of this application or proceeding or any inquiry of a general nature concerning application processing should be directed to the Tech Center 2600 Customer Service center at 571-272-2600 or to the USPTO Contact Center at 800-786-9199 or 571-272-1000.

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The examiner can normally be reached on weekdays 8:00-5:30, alternate Fridays off.

The examiner's unit designation has been changed from "Art Unit 2624" to "Technology Division 2625" (as of March 20, 2006).

If attempts to contact the examiner and the Customer Service Center are unsuccessful, supervisor David Moore can be contacted at 571-272-7437.

Faxes pertaining to this application should be directed to the Tech Center 2600 official fax number, which is 571-273-8300 (as of July 15, 2005).

Hand-carried correspondence may be delivered to the Customer Service Window, located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Stephen M Brinich  
Examiner  
Technology Division 2625

smb   
December 19, 2006



THOMAS D. LEE

Sheet 1 of 1Form PTO-1449  
(REV. 8-83)US Dept. of Commerce  
PATENT & TRADEMARK OFFICEATTY DOCKET NO.  
112054APPLICATION NO.  
10/081,182

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS  
Minoru KOSHIMIZU et al.FILING DATE  
February 25, 2002

## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL |  | DOCUMENT NUMBER | DATE | NAME | CLASS | SUB<br>CLASS |
|---------------------|--|-----------------|------|------|-------|--------------|
|                     |  |                 |      |      |       |              |
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## FOREIGN PATENT DOCUMENTS

|     |   | DOCUMENT NUMBER  | DATE       | COUNTRY | CLASS | SUB<br>CLASS |
|-----|---|------------------|------------|---------|-------|--------------|
| SMB | 1 | Jp A 2000-111942 | 04/21/2000 | Japan   |       |              |
|     |   |                  |            |         |       |              |
|     |   |                  |            |         |       |              |
|     |   |                  |            |         |       |              |
|     |   |                  |            |         |       |              |

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

|     |   |   |
|-----|---|---|
| SMB | 2 | Arisawa et al., "Electronic Paper using Cholesteric Liquid Crystal - Photo Addressing with Organic Photo Conductor -", Japan Hardcopy, pp. 89-92, 2000  |
| SMB | 3 | Kamiyama et al., "Research for Elgraphy", Japan Hardcopy, p. 25, 1996   |
| SMB | 4 | Yoshida et al., "Reflective Display with Photoconductive Layer and a Bistable, Reflective Cholesteric Mixture", SID Application Digest, pp. 59-62, 1996 |
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EXAMINER /Stephen Brinich/

DATE CONSIDERED  
12/14/2006

Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Date: April 4, 2002



|   |             |  |          |   |                             |                                |  |
|---|-------------|--|----------|---|-----------------------------|--------------------------------|--|
| Form PTO-1449<br>(REV. 1/06)  |             | US Dept. of Commerce<br>PATENT & TRADEMARK OFFICE          |          | ATTY DOCKET NO.<br>112054               |                             | APPLICATION NO.<br>10/081,182  |  |
| INFORMATION DISCLOSURE STATEMENT<br><br>(Use several sheets if necessary)   |             |  |          | APPLICANT(S)<br>Minoru KOSHIMIZU et al. |                             |                                |  |
|   |             |  |          | FILING DATE<br>February 25, 2002        |                             | GROUP<br>2625                  |  |
| U.S. PATENT DOCUMENTS   |             |  |          |   |                             |                                |  |
| Examiner<br>Initials  | Cite<br>No. | Document Number  | Date     | Name                                    |                             |                                |  |
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| FOREIGN PATENT DOCUMENTS  |             |  |          |   |                             |                                |  |
| Examiner<br>Initials  | Cite<br>No. | Document Number  | Date     | Country                                 | With<br>English<br>Abstract | With<br>English<br>Translation |  |
| SMB   | 1           | JP A 2001-92016  | 4/6/2001 | Japan                                   | X                           | X                              |  |
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| OTHER DOCUMENTS   |             |  |          |   |                             |                                |  |
| Examiner<br>Initials  | Cite<br>No. | (Including Author, Title, Date, Pertinent Pages, etc.)     |          |   |                             |                                |  |
| SMB   | 2           | Japanese Office Action No. 2001-230060, September 12, 2006 |          |   |                             |                                |  |
|   |             |  |          |   |                             |                                |  |
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| EXAMINER  |             |  |          | DATE CONSIDERED                         |                             |                                |  |
| /Stephen Brinich/   |             |  |          | 12/14/2006                              |                             |                                |  |
| Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |             |  |          |   |                             |                                |  |

Date: October 11, 2006

KNOX

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